Temperature Calibration & Measurement System

Introduction

- This unit has been designed to study temperature measuring Techniques and the modes of calibration of the relevant sensors by means of fixed points and of a thermometer provided with calibration certificate. It consists of a hot water bath and of an ice bath to determine precise reference points (boiling point and melting point of Water) and variable temperatures. A set of thermometers of different types is fixed onto a support that can be moved from the hot bath to the ice bath. The available thermometers are.
- Reference Pt100 thermo resistance with calibration certificate
- Industrial Pt100 thermo resistance
- Two K-type thermocouples
- PTC thermistor
- Inert gas thermometer
- Liquid thermometer

Technical Specification

- Thermal bath of AISI 304 stainless steel equipped with:
- Stirrer
- Shielded heating element
- Safety level switch
- Digital temp. Indicator-cum-Controller
- Working temperature range:- 5°C ~100°C
- 6 holes and 8 liters capacity
- Dewar flask of stainless steel with high vacuum insulation,
- Capacity of 1 litre
- Support for thermometers
- Reference Pt100 thermo resistance with 3 points calibration Certificate
- Range :-50 to 200C
- Accuracy:- :± 0.1C
- Resolution : 0.01C
- Input J, K, Pt100

Different Type Of Temperature Sensor

- Industrial Pt100 thermo resistance of class A
- Range: -200 to 650C
- Accuracy: ± 0.2C
- K-type thermocouple.
- Thermistor (PTC)
- Liquid thermometer
- Range:- -10 to 110C
- Gas thermometer
- Range:- 0 to 100C
- Accuracy:- ± 3C
- Electric console with 20*4 LCD displays and controls.
- PC/USB interface for calibration.
- Milli Voltmeter Range:- 0mV to + 3300mV